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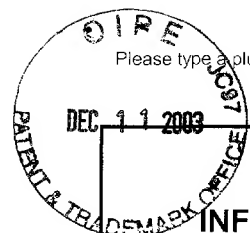
Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	09/731,891
				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Thuan V. Do
Sheet	1	of	4	Attorney Docket Number	SPLX.P0002

RELATED U.S. PATENT DOCUMENTS					
Examiner* Initials	Cite No. ¹	U.S. Patent Document	Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number			
	1.	2002/0100007	12-06-2000	Steven Teig et al.	Application regarding related placement technology.
	2.	2002/0073390 S/N 09/737,210	12-13-2000	Steven Teig et al.	Continuation of present application
	3.	Preliminary Amendment S/N 09/737,210	12-13-2000	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0073390 does not accurately reflect the claims of S/N 09/737,210.
	4.	Preliminary Amendment S/N 09/737,220	12-13-2000	Steven Teig et al.	Continuation of present application
	5.	Preliminary Amendment S/N 09/737,245	12-13-2000	Steven Teig et al.	Continuation of present application
	6.	Preliminary Amendment S/N 09/739,460	12-15-2000	Steven Teig et al.	Continuation of 2002/0100007
	7.	2002/0124231 S/N 09/739,580	12-15-2000	Steven Teig et al.	Continuation of 2002/0100007
	8.	Preliminary Amendment S/N 09/739,580	12-15-2000	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0124231 does not accurately reflect the claims of S/N 09/739,580.
	9.	Preliminary Amendment S/N 09/739,589	12-15-2000	Steven Teig et al.	Continuation of 2002/0100007
	10.	Preliminary Amendment S/N 09/742,171	12-19-2000	Steven Teig et al.	Continuation of 2002/0100007
	11.	6,651,233	11-18-2003	Teig et al.	Continuation of 2002/0100007
	12.	2002/0069397	01-13-2002	Steven Teig et al.	CIP of 2002/0100007

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	2	of	4	Application Number	09/731,891
				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Thuan V. Do
				Attorney Docket Number	SPLX.P0002

RELATED U.S. PATENT DOCUMENTS

13.	2002/0170027	02-20-2002	Steven Teig et al.	CIP of 2002/0100007
14.	2002/0157075	02-20-2002	Steven Teig et al.	CIP of 2002/0100007
15.	2003/0088841 S/N 10/329,241	12-23-2002	Steven Teig et al.	CIP of present application
16.	Preliminary Amendment S/N 10/329,241	12-23-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0088841 does not accurately reflect the claims of S/N 10/329,241.
17.	2003/0018947	12-07-2001	Steven Teig et al.	Application regarding related routing technology
18.	2002/0147958	10-19-2001	Steven Teig et al.	Application regarding related routing technology
19.	2003/0079193	12-07-2001	Steven Teig et al.	Application regarding related routing technology
20.	2003/0063614	01-04-2002	Steven Teig et al.	Application regarding related routing technology
21.	2003/0064559	01-04-2002	Steven Teig et al.	Application regarding related routing technology
22.	2003/0063568	01-04-2002	Steven Teig et al.	Application regarding related routing technology
23.	2003/0101428 S/N 10/040,915	01-05-2002	Steven Teig et al.	Application regarding related routing technology
24.	Preliminary Amendment S/N 10/040,915	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0101428 does not accurately reflect the claims of S/N 10/040,915.
25.	2002/0166105 S/N 10/040,948	01-05-2002	Steven Teig et al.	Application regarding related routing technology
26.	Preliminary Amendment S/N 10/040,948	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0166105 does not accurately reflect the claims of S/N 10/040,948.
27.	2003/0043827	01-05-2002	Steven Teig et al.	Application regarding related routing

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				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Thuan V. Do
Sheet	3	of	4	Attorney Docket Number	SPLX.P0002

RELATED U.S. PATENT DOCUMENTS					
		S/N 10/040,953			technology
28.	Preliminary Amendment S/N 10/040,953	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0043827 does not accurately reflect the claims of S/N 10/040,953.	
29.	2003/0023943 S/N 10/040,954	01-05-2002	Steven Teig et al.	Application regarding related routing technology	
30.	Preliminary Amendment S/N 10/040,954	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0023943 does not accurately reflect the claims of S/N 10/040,954.	
31.	2003/0066042 S/N 10/040,963	01-05-2002	Steven Teig et al.	Application regarding related routing technology	
32.	Preliminary Amendment S/N 10/040,963	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0066042 does not accurately reflect the claims of S/N 10/040,963.	
33.	2002/0174412 S/N 10/041,942	01-07-2002	Steven Teig et al.	Application regarding related routing technology	
34.	Preliminary Amendment S/N 10/041,942	01-07-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0174412 does not accurately reflect the claims of S/N 10/041,942.	
35.	2003/0088844 S/N 10/041,957	01-07-2002	Steven Teig et al.	Application regarding related routing technology	
36.	Preliminary Amendment S/N 10/041,957	01-07-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0088844 does not accurately reflect the claims of S/N 10/041,957.	
37.	2002/0199165 S/N 10/046,864	01-13-2002	Steven Teig et al.	Application regarding related routing technology	
38.	Preliminary Amendment S/N 10/046,864	01-13-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0199165 does not accurately reflect the claims of S/N	

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				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Thuan V. Do
Sheet	4	of	4	Attorney Docket Number	SPLX.P0002

RELATED U.S. PATENT DOCUMENTS					
					10/046,864.
	39.	2003/0066043	01-13-2002	Steven Teig et al.	Application regarding related routing technology
	40.	2003/0115566	01-13-2002	Steven Teig	Application regarding related routing technology
	41.	2003/0056187 S/N 10/047,982	01-14-2002	Steven Teig et al.	Application regarding related routing technology
	42.	Preliminary Amendment S/N 10/047,982	01-14-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0056187 does not accurately reflect the claims of S/N 10/047,982.
	43.	2003/0066044	01-13-2002	Steven Teig et al.	Application regarding related routing technology
	44.	6,618,849	09-09-2003	Teig et al.	Application regarding related routing technology
	45.	2003/0088845 S/N 10/047,978	05-08-2002	Steven Teig et al.	Application regarding related routing technology
	46.	Preliminary Amendment S/N 10/047,978	05-08-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0088845 does not accurately reflect the claims of S/N 10/047,978.

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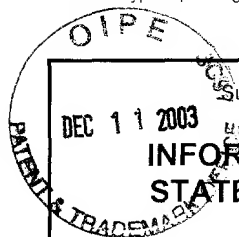
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Sheet	1	of	7	Attorney Docket Number	SPLX.P0002

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Examiner* Initials	Cite No.	U.S. Patent Document		Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	1.	2001/0009031	A1	07-19-2001	Nitta et al.	
	2.	2002/0182844	A1	12-05-2002	Igarashi et al.	
	3.	2003/0005399	A1	01-02-2003	Igarashi et al.	
	4.	2003/0225205	A1	02-06-2003	Shively	
	5.	4,593,363		06-03-1986	Burstein et al.	
	6.	4,855,929		08-08-1989	Nakajima	
	7.	5,267,176		11-30-1993	Antreich et al.	
	8.	5,375,069		12-20-1994	Satoh et al.	
	9.	5,587,923		12-24-1996	Wang	
	10.	5,618,744		04-08-1997	Suzuki et al.	
	11.	5,633,479		05-27-1997	Hirano	
	12.	5,637,920		06-10-1997	Loo	
	13.	5,640,327		06-17-1997	Ting	
	14.	5,663,891		09-02-1997	Banji et al.	
	15.	5,757,089		05-26-1998	Ishizuka	
	16.	5,784,289		07-28-1998	Wang	
	17.	5,798,936		08-25-1998	Cheng	
	18.	5,838,583		11-17-1998	Varadarajan et al.	
	19.	5,889,677		03-30-1999	Yasuda et al.	
	20.	5,980,093		11-09-1999	Jones et al.	
	21.	6,070,108		05-30-2000	Andreev et al.	

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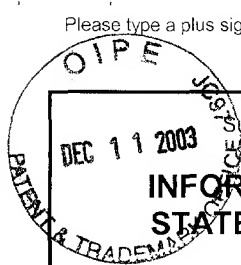
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U.S. PATENT DOCUMENTS					
22.	6,128,767		10-03-2000	Chapman	
23.	6,209,123	B1	03-27-2001	Maziasz et al.	
24.	6,253,363	B1	06-26-2001	Gasarov et al.	
25.	6,295,634	B1	09-25-2001	Matsumoto	
26.	6,324,674	B2	11-27-2001	Andreev et al.	
27.	6,324,675	B1	11-27-2001	Dutta et al.	
28.	6,327,693	B1	12-04-2001	Cheng et al.	
29.	6,327,694	B1	12-04-2001	Kanazawa	
30.	6,330,707	B1	12-11-2001	Shinomiya et al.	
31.	6,378,121	B2	04-23-2002	Hiraga	
32.	6,407,434	B1	06-18-2002	Rostoker et al.	
33.	6,412,102	B1	06-25-2002	Andreev et al.	
34.	6,415,422	B1	07-02-2002	Mehrotra et al.	
35.	6,442,743	B1	08-27-2002	Sarrafzadeh et al.	
36.	6,448,591	B1	09-10-2002	Juengling	
37.	6,473,891	B1	10-29-2002	Shively	
38.	6,480,991	B1	11-12-2002	Cho et al.	
39.	6,490,713	B2	12-03-2002	Matsumoto	
40.	6,519,751	B2	02-11-2003	Sriram et al.	
41.	6,543,043	B1	04-01-2003	Wang et al.	
42.	6,546,540	B1	04-08-2003	Igarashi et al.	
43.	6,557,145	B2	04-29-2003	Boyle et al.	
44.	6,567,967	B2	05-20-2003	Greidinger et al.	

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		Office ³	Number ⁴	Kind Code (if known) ⁵				
	45.	JP	411296560	A	10-29-1999	Matsumoto et al.	with English translation of Abstract;	
	46.	JP	2000-82743	A	03-21-2000	Igarashi et al.	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	47.	JP	H03-173471	A	07-26-1991	Tawada et al.	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	48.	JP	H05-243379	A	09-21-1993	Masako Kubota	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	49.	JP	H05-102305	A	04-23-1993	Akihiro Sato	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	50.	JP	H07-86407	A	03-31-1995	Shinpei Miura	with Japanese Patent Office's English translation of Abstract;	✓

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STATEMENT BY APPLICANT**

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Sheet	4	of	7	Application Number	09/731,891
				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Thuan V. Do
				Attorney Docket Number	SPLX.P0002

FOREIGN PATENT DOCUMENTS

							and with English translation of the application.	
	51.	JP	H09-162279	A	06-20-1997	Masaaki Yoshida	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓

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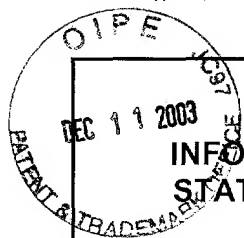
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Sheet	5	of	7	Attorney Docket Number	SPLX.P0002

NON PATENT LITERATURE DOCUMENTS					
Examiner* Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ⁶
	52.	Ahuja, R. et al., Faster Algorithms for the Shortest Path Problem, Journal of the Association for Computing Machinery, vol. 37, No. 2, April 1990, pp. 213-223.			
	53.	Brady, L. et al., Channel Routing on a 60° Grid, extended abstract, pp. 956-931.			
	54.	Brambilla, A. et al., Statistical Method for the Analysis of Interconnects Delay in Submicrometer Layouts, IEEE, 8/2001, pp. 957-966.			
	55.	Carothers, K., A Method of Measuring Nets Routability for MCM's General Area Routing Problems, 1999, pp. 186-192.			
	56.	Chen, H. et al., Physical Planning of On-Chip Interconnect Architectures, 2002, IEEE, International Conference, pp. 30-35.			
	57.	Cheng, K. et al., Manhattan or Non Manhattan? A Study of Alternative VLSI Routing Architectures, pp 47-52, 2000.			
	58.	Cheng, K., Steiner Problem in Octilinear Routing Model, a Thesis Submitted for the Degree of Master of Science, National University Singapore, 1995, pp. 1-122.			
	59.	Chip Model with Wiring Cost Map, August 1983, IBM Technical Disclosure Bulletin, vol. 26, iss. 3A, pp. 929-933.			
	60.	Cong, J. et al., Efficient Heuristics for the Minimum Shortest Path Steiner Arborrescence Problem with Applications to VLSI Physical Design, Cadence Design Systems and UCLA Computer Science Department, pp.88-95.			
	61.	Cong, J. et al., Performance-Driven Multi-Layer General Area Routing for PCB/MCM Designs, UCLA Computer Science Department, 1998, pp. 356-361.			
	62.	Enbody, R. et al., Near-Optimal <i>n</i> -Layer Channel Routing, 23 rd Design Automation Conference, 1986, pp. 708-714.			
	63.	Fang, S. et al., Constrained Via Minimization with Practical Considerations for Multi-Layer VLSI/PCB Routing Problems, 28 th ACM/IEEE Design Automation Conference, 1991, pp. 60-65.			
	64.	Hom, I. et al., Estimation of the Number of Routing Layers and Total Wirelength in a PCB Through Wiring Distribution Analysis, 1996, pp. 1-6.			

Examiner Signature	Date Considered
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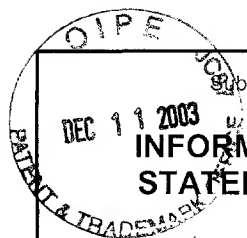
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				Group Art Unit	2825
				Examiner Name	Thuan V. Do
Sheet	6	of	7	Attorney Docket Number	SPLX.P0002

NON PATENT LITERATURE DOCUMENTS

65.	Hong, X. et al., Performance-Driven Steiner Tree Algorithms for Global Routing, 30 th ACM/IEEE Design Automation Conference, 1993, pp. 177-181.	
66.	Jiang Hu et al.: "A Timing-Constrained algorithm for Simultaneous Global Routing of Multiple Nets" IEEE/ACM International Conference on Computer Aided Design. ICCAD – 2000. IEEE/ACM Digest of Technical Papers (CAT. NO.00CH37140), Proceedings of International Conference on Computer Aided Design (ICCAD), San Jose, CA USA, 5-9 Nov. 2000. Pages 99-103.	
67.	Kastner R et al.: "Predictable Routing" IEEE/ACM International Conference on Computer Aided Design. ICCAD – 2000. IEEE/ACM Digest of Technical Papers (CAT. NO.00CH37140), Proceedings of International Conference on Computer Aided Design (ICCAD), San Jose, CA, USA, 5-9 Nov. 2000. Pages 110-113.	
68.	Khoo, K. et al., An Efficient Multilayer MCM Router Based on Four-Via Routing, 30 th ACM/IEEE Design Automation Conference, 1993, pp. 590-595.	
69.	Lillis, J. et al., Table-Lookup Methods for Improved Performance-Driven Routing, 1998, pp. 368-373.	
70.	Lipski, W. et al., A Unified Approach to Layout Wirability, Mathematical Systems Theory, 1987, pp. 189-203.	
71.	Lodi, E. et al., A Preliminary Study of a Diagonal Channel-Routing Model, Algorithmica, 1989, pp.585-597.	
72.	Lodi, E. et al., Lecture Notes in Computer Science, A 4d Channel Router for a Two Layer Diagonal Model, pp. 464-476, July 1988.	
73.	Naclerio, N. et al., Via Minimization for Gridless Layouts, 24 th ACM/IEEE Design Automation Conference, 1987, pp. 159-165.	
74.	Nam, G. et al, Satisfiability-Based Layout Revisited: Detailed Routing of Complex FPGAs Via Search-Based Boolean SAT, 1999, pp. 167-175..	
75.	Oh, J. et al., Constructing Lower and Upper Bounded Delay Routing Trees Using Linear Programming, 33 rd Design Automation Conference, 1996.	
76.	Partitioning Logic on to Graph Structure, IBM Technical Disclosure Bulletin, February 1990, vol. 32, iss. 9A, pp. 469-475.	
77.	Phillips, N., Channel Routing by Constraint Logic, Department of Computer Science Southern Illinois University, ACM, 1992.	

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NON PATENT LITERATURE DOCUMENTS

78.	Takashima, Y. et al, Routability of FPGAs with Extremal Switch-Block Structures, IEICE Trans. Fundamentals, vol. E81-A, No. 5, May 1998, pp. 850-856.	
79.	Thakur, S. et al., Algorithms for a Switch Module Routing Problem, 1994, pp. 265-270.	
80.	Theune, D. et al., HERO: Hierarchical EMC-constrained routing, 11/1992, IEEE pp 468-472.	
81.	Tseng, H., Timing and Crosstalk Driven Area Routing, pp. 378-381.	
82.	Wang, D., Novel Routing Schemes for IC Layout, Part I: Two-Layer Channel Routing, 28 th ACM/IEEE Automation Conference, 1991, pp. 49-53.	
83.	Wang, M. et al., Modeling and Minimization of Routing Congestion, Jan. 2000, IEEE proceedings of ASP-DAC, Asia and South Pacific, pp. 185-190.	
84.	Wood, G. et al., FPGA Routing and Routability Estimation Via Boolean Satisfiability, Department of Electrical and Computer Engineering Carnegie Mellon University, Pittsburgh, PA, pp. 119-125.	
85.	Zhang, C.X. et al., Floorplan Design Using a Hierarchical Neural Learning Algorithm, IEEE, 6/1991. pp. 2060-2063.	
86.	Zhou, H. et al., An Optimal Algorithm for River Routing with Crosstalk Constraints, 1996.	
87.	Zhou, H. et al., Global Routing with Crosstalk Constraints, Department of Computer Sciences, University of Texas, 1998, pp. 374-377.	
88.	Zhou, H. et al., Optimal River Routing with Crosstalk Constraints, ACM Transactions on Design Automation of Electronic Systems, vol. 3, No. 3, July 1998, pp. 496-514.	

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